Cotton Insect Newsletter

Volume 2, Issue #3 **Edisto Research & Education Center in Blackville, SC** **24 May 2007**

Crop Situation

Plants need water to grow, and Mother Nature is not providing any. It continues to be extremely dry. Seedling cotton is struggling right now to either get out of the ground or to stay alive until we get some H_2O. I believe we have a rainfall deficit for 2007 somewhere between 0.5-1.0 feet of rain. When you can start talking about missing rain in terms of "feet", it must be dry! The NASS had us at about 66% planted at 20 May 2007, just behind the 5-yr average of 70%.

News from Above the Lakes

No news to report this week. This is your turn for input – send your comments and observations to me.

News from Below the Lakes

Tommy Walker (Hampton/Jasper Counties) reported that most of the cotton fields in his area look good. Although some of the earliest planted cotton has crinkled true leaves due to cool weather and some thrips feeding, few fields have been sprayed for thrips. Fields fortunate enough to have moisture look good.

Thrips

It remains extremely dry in most places and cotton is not growing very well because of inadequate moisture. This gives thrips a great opportunity to feed on young, tender seedlings for an extended period of time. Young cotton plants in this situation are like a dazed boxer in the corner being pummeled by his opponent. How long can he stay on his feet and take that punishment? Our options are throwing in the towel or waiting on the bell (rain). Despite these conditions, I have not noticed severe populations of thrips yet, but the fight just started – still in round 1. The situation will likely change as the cotton crop grows slowly through the seedling stage, and I would anticipate problems with thrips during the next few weeks. Regardless of the preventative treatment (Temik, Avicta Complete Pak, Aeris, Cruiser, Gaucho Grande, etc.) you have chosen, keep an eye on the plants and thrips. Use a white cup to sample for thrips on individual plants. If you shake off several thrips per plant, averaged over a number of samples, and you seed immatures, the field might require a foliar application of insecticide. Also look for injury to true leaves and the growing points of seedlings, but never treat on injury alone. Make sure you have populations of thrips to go with the injury. You will get the best return on applications made before the 4th true leaf, and, in most cases, the best time is much earlier than when you would apply glyphosate at the 4th-5th leaf stage. Almost all applications of insecticide for thrips at this time are for "revenge" and contribute little to the success of the crop. If an application of insecticide is needed, the standard materials, such as acephate (Orthene 90 or 97, Acephate 90, etc.), dicrotophos (Bidrin 8), and dimethoate (Dimethoate 4, etc.), continue to do a fine job of controlling thrips. Refer to the table and text below for rates.

THRIPS (FOLIAR SPRAYS)

Product	Product/acre	Lb ai/acre	Acre/gal	REI	PHI	Comments
dicrotophos **(R)**		0.1-0.2		6 d	30 d	3.2 oz limit
Bidrin 8 E	1.6-3.2 oz		40-80			pre-square
acephate		0.15-0.18		24 hr	21 d	
Orthene 97	2.5-3.0 oz		-			
Orthene 90 S	2.67-3.2 oz		-			
Acephate 90 S	2.67-3.2 oz		-			
dimethoate		0.125-0.25		48 hr	14 d	
Dimethoate 4 EC	4-8 oz		16-32			
methamidophos **(R)**		0.1-0.2		48 hr	50 d	
Monitor 4 EC	3.2-6.4 oz		20-40			

Generally a soil insecticide used at planting will protect seedling plants from the severe stunting that is characteristic of thrips injury. Occasionally, however, conditions will be unfavorable for proper uptake of systemic insecticides (too cool, dry soil, excessive moisture, etc.) and plants can be severely damaged. **Foliar treatments will be most effective when applied to cotton seedlings prior to unfolding of the second true leaf**. At this growth stage a foliar insecticide treatment may be needed when two or more thrips are found per plant. Shake each plant (randomly select 25 or more) into a coffee cup or a similar utensil to facilitate counting. When most plants have severely damaged growing points and immature thrips are present, one or more foliar treatments may be needed to allow the plants to resume normal growth and development. Examine plants 5-7 days after the initial treatment, and treat again if immatures are still present on most plants. When the newly unfolded leaves of infested plants are free of damage, and plants appear to be growing at a normal rate, further applications of insecticides will have little benefit. Treatments applied beyond the four-leaf stage of growth may actually be counter productive, as these would likely reduce beneficial populations and result in early-season problems with other pests.

Printed Cotton Insect Recommendations

Copies of the newly revised "Cotton Insect Management" (IC 97) recommendations are available at your local county office. You can visit the following website for an electronic version of the recommendations:
http://www.clemson.edu/psapublishing/pages/ENTOM/IC97.PDF

Need More Information?

Log on to the following webpages to view important cotton management recommendations, data, and historical cotton insect newsletters:
http://www.clemson.edu/edisto/cotton/cotton.htm
http://www.clemson.edu/scg/ipm/cotton.html

Sincerely,

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